Seventh Annual

Seattle Epidemiology, Biostatisics & Clinical Research Methods *Summer Session*

June 20-24, 2005 ◆ University of Washington ◆ Seattle

Seattle Epidemiologic Research & Information Center

Department of Veterans Affairs
Cooperative Studies Program
Office of Research & Development

University of Washington
School of Public Health
Department of Epidemiology
Department of Biostatistics

Seventh Annual

Seattle Epidemiology, Biostatisics & Clinical Research Methods *Summer Session*

I N V I T A T I O N

The Seattle VA Epidemiologic Research and Information Center (ERIC) and the University of Washington Departments of Epidemiology and Biostatistics are pleased to invite you to the 7th Annual Epidemiology, Biostatistics and Clinical Research Methods Summer Session June 20-24, 2005, on the University of Washington campus in Seattle.

The Summer Session offers cutting-edge courses on clinical research issues taught by preeminent faculty from top universities. All public-health professionals – both VA and non-VA – are invited to attend.

Cover photo by Chuck Pefley

To register online go to www.eric.seattle.med.va.gov

Summer Session Planning Committee

Edward J. Boyko, MD, MPH, Course Director and Director, Seattle ERIC, Professor, Internal Medicine, University of Washington, Seattle

Thomas Koepsell, MD, MPH, Associate Director, Seattle ERIC, Professor, Epidemiology and Health Services, University of Washington, Seattle

John L. Messina, Program Coordinator, Seattle ERIC

Phillip Terry, MHA, Assistant Director, Seattle ERIC

LuAnne Couture, BA, Education Service Representative, VA Employee Education System, Salt Lake City-Boise Campus

Scott Davis, PhD, Chairman, Department of Epidemiology, University of Washington, Seattle

Stuart C. Gilman, MD, MPH, FACP, Director, VA Health Professional Accreditation, Long Beach, CA

Patrick Heagerty, PhD, Associate Professor, Biostatistics, University of Washington, Seattle

Jack Hoffman, Manager, UWTV Production, Seattle

Anthony J. Mariano, PhD, Clinical Psychologist, VA Puget Sound Health Care System, Seattle

Daniel R. Mayhew, Managing Director, VA Knowledge Network Employee Education System, Salt Lake City

Deidra R. McLauchlan, CME Program Coordinator, VA Puget Sound Health Care System, Tacoma, WA

Phillip G. Rakestraw, PhD, Director, Center for Education & Development, VA Puget Sound Health Care System, Seattle

Raymond Spry, MBA, MSOD, Senior Instruction Systems Manager, VA Employee Education System, Salt Lake City

Sean Sullivan, PhD, Professor, Pharmacy and Health Services, University of Washington, Seattle

Anne Toothaker, RN, Education Specialist, Employee Education System, Salt Lake City-Boise Campus

Susan Turner, EdD, MLS, Senior Director, UW Educational Outreach, Seattle

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Seventh Annual
Seattle Epidemiology, Biostatisics & Clinical Research Methods Summer Session

Course Schedule

Learning Objective

To provide state-of-the-art information on epidemiology, biostatistics and clinical research methods to epidemiologists, biostatisticians, researchers and clinical professionals

Target Audience

Early- and mid-career clinical and research professionals

Select one course for each time frame

8:00 AM - 10:00 AM M-F (Choose One)	10:30 AM - 12:30 PM M-F (Choose One)	2:00 PM - 4:30 PM M-Th (Choose One)
1. Introduction to Epidemiologic Methods *Koepsell, Weiss*		2. Developing Scientific Research Proposals (Grant Writing) *Kristal*
3. General Biostatistics *Diener-West*	4. Introduction to STATA® *Diener-West*	5. Introduction to SAS® *Walsh*
6. Introduction to Linear Regression *McKnight*	7. Multilevel Data Analysis* *Leroux*	8. Applied Survival Analysis *Heagerty*
9. Clinical Trials: A Practical Guide to Design, Implementation, Analysis and Reporting *Anderson, LaCroix*	10. Pharmacoepidemiology *Johnson*	11. Psychiatric Epidemiology *Goldberg, Breitner*
12. Economic Analysis with VA Data* *Wagner, Smith*	13. Advances in Measuring Health Outcomes from the Patient and Provider Perspective *Ware, Diehr*	14. Using VA Data for Research: Cancer as an Example* *Sohn, DesHarnais*

* This course will be videotaped for 2006 Cyber Session.
Suggested courses for new researchers: 1, 2, 3, 4, 5, 11, 12, 14

Course Descriptions

1. Introduction to Epidemiologic Methods
Faculty: Thomas D. Koepsell, MD, MPH, Noel S. Weiss, MD, DrPH

This course aims to provide students with a basic understanding of epidemiologic methods. It is intended for students who are considering using epidemiologic study designs in their research, and for those who need a firm grounding in epidemiologic principles to interpret research results critically. Planned topics include measures of disease frequency, descriptive epidemiology, causal inference, measures of excess risk, measurement error and confounding. The course will also cover several specific study designs, including randomized trials, cohort studies and case-control studies. Discussion of examples and exercises in class will complement lectures and key readings. *No prerequisites.*

2. Developing Scientific Research Proposals (Grant Writing)
Faculty: Alan R. Kristal, DrPH, MPH

Students in this course will develop skills in organizing, writing and critiquing research proposals. Students will first develop skills in developing, organizing and writing specific aims. Next, the course focuses on strategies for preparing and writing the background, significance and prior studies sections of proposals. A strong emphasis is placed on developing the proposal methods section, including often overlooked but important sections on analysis and power. The course concludes with abstract essentials, budget development and study section realities. Students are encouraged to bring their research proposals in development. Numerous examples are provided and discussed to illustrate grant writing techniques. *No prerequisites. The course is most appropriate for scientists with previous training in research methods who are planning to submit research proposals for peer review.*

3. General Biostatistics
4. Introduction to STATA®
Faculty: Marie Diener-West, PhD

General Biostatistics
This general biostatistics course introduces students to concepts and application of biostatistics methods including descriptive statistics, exploratory data analysis, probability distributions, sampling distributions, estimation and hypothesis testing. Students will develop skills that will enable them to compare means of two groups, proportions of two groups and means and proportions of more than two groups. The course concludes with sample size, power, analysis of variance and simple linear regression. Daily reading and homework will complement lectures and assist the student in developing basic biostatistics competencies. *No prerequisites.*

Introduction to STATA®
Students in this hands-on course, using STATA 8, will learn common commands, techniques for data and file management and strategies for data checking and reading datasets into STATA software packages. In hands-on sessions, students will practice skills using problems from the General Biostatistics course and provided datasets. *Prerequisites: Computer familiarity and an introductory biostatistics course for those not also enrolling in the General Biostatistics course.*

5. Introduction to SAS®
Faculty: Sue Walsh, MBA, MS

Students in this hands-on course will learn Enterprise Guide, a thin-client interface to the SAS System that provides transparent access to data, point-and-click usability, a customizable user interface, and export of results to other software applications. This workshop will introduce Enterprise Guide to explore and analyze data and then use the output to write reports and give presentations. Topics covered will include queries, one-way frequency tables, graphing, hypothesis testing, ANOVA, regression and logistic regression. *Prerequisites: Computer familiarity and familiarity with basic statistical concepts.*

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6. Introduction to Linear Regression
Faculty: Barbara McKnight, PhD

This course will provide an introduction to linear regression modeling with a particular emphasis on the interpretation of regression model coefficients. Students will learn the use of regression to control for confounding or to assess interaction (effect modification) and will discuss how the scientific purpose of the statistical analysis determines the regression modeling strategy. *Prerequisites: Completion of an introductory biostatistics course*.

7. Multilevel Data Analysis
Faculty: Brian G. Leroux, PhD

Students in this course will learn the basic concepts in modeling of clustered data and how to apply them to health sciences research. The lectures will focus on the interpretation of statistical models for multilevel data, different ways of formulating multilevel models and regression analysis methods that accommodate correlations between outcomes. Examples from the literature and data applications using STATA software will be presented. *Prerequisites: Familiarity with regression analysis*.

8. Applied Survival Analysis
Faculty: Patrick Heagerty, PhD

Students in this course will learn statistical methods for the analysis of censored survival data. In particular, students will learn to characterize the survival distribution using life table methods and Kaplan-Meier methods. Statistical methods to compare the survival course for multiple groups will be introduced and regression techniques appropriate for censored survival outcomes will be discussed, including Cox proportional hazards regression methods. *Prerequisites: Completion of a basic biostatistics course and a course on regression methods*.

9. Clinical Trials: A Practical Guide to Design, Implementation, Analysis and Reporting
Faculty: Garnet Anderson, PhD, Andrea LaCroix, PhD

This course will provide students with an understanding of the fundamental design, implementation and analysis issues of randomized clinical trials. Specific topics will include protocol development and statistical design, recruiting and adherence monitoring, statistical analyses, and trial monitoring for safety and efficacy, and dissemination of study findings. Examples will be drawn primarily from the Women's Health Initiative randomized trials. *Prerequisites: Completion of an introductory biostatistics course*.

10. Pharmacoepidemiology
Faculty: Eric S. Johnson, PhD

This course explains methodologic principles for designing pharmacoepidemiologic studies—both etiologic and natural history studies. Readings and seminar-style discussions help students apply the methodologic principles to retrospective databases. Students will review a sample of rigorous, published pharmacoepidemiologic designs that are worth emulating in their own investigations. *Prerequisites: Familiarity with epidemiologic methods*.

To register online go to www.eric.seattle.med.va.gov

11. Psychiatric Epidemiology
Faculty: Jack Goldberg, PhD, John C.S. Breitner, MD, MPH

The course will introduce basic concepts and research methods in psychiatric epidemiology. Planned topics include operational case definitions and diagnostic criteria in psychiatry, epidemiologic study designs appropriate for psychiatric disorders, measurement tools including scales and structured interviews, and the epidemiology of selected psychiatric disorders. The course emphasizes epidemiologic methods and provides the student with an appreciation of how epidemiology can be used in studies of the prevention, etiology and treatment of psychiatric disorders. *No prerequisites.*

12. Economic Analysis with VA Data
Faculty: Mark W. Smith, PhD, Todd H. Wagner, PhD

This course will explore methods for conducting cost-effectiveness analysis in VA studies. It starts with a description of how to estimate costs using surveys, fee schedules and cost regressions. Faculty will describe the Decision Support System national extracts and the HERC average cost data sets. Next, the course includes a description of ways to measure "effectiveness" for a cost-effectiveness analysis, focusing specifically on utilities. The final topic will bring all of the threads together and cover the core elements of cost-effectiveness analyses and how these may be modified for managerial studies. *No prerequisites.*

13. Advances in Measuring Health Outcomes from the Patient and Physician Perspective
Faculty: John E. Ware, Jr, PhD, Paula Diehr, PhD

This course builds upon concepts, methods and applications for measuring health outcomes. Course content will include strategies to improve patient-reported health outcomes. Traditional health assessment formats will be compared with innovative computerized, dynamic Internet health assessments including a discussion on scoring and interpretation. Interpreting health outcomes will be discussed from the patient's and physician's point of view. *Prerequisites: Familiarity with psychometric properties.*

14. Using VA Databases for Research: Cancer as an Example
Faculty: Min-Woong Sohn, PhD, Susan DesHarnais, PhD

The course will provide new and experienced VA researchers with in-depth training on the use of various VA Inpatient and Outpatient Datasets. The course will focus on research regarding cancer care in the VA system, as an example of how the analyst might use VA and linked datasets to address a variety of important research questions. Students will learn the limitations that would need to be addressed/acknowledged/overcome to address these issues. There will be an overview of VA databases for research, the conceptual understanding of the construction of the datasets, how to access them, how to extract variables, how to select samples for a group of veterans with specific diseases or procedures, what data quality concerns there are in using some specific variables (e.g., race variables, death dates, ICD-9 coding), what issues there are in linking these datasets with other databases, such as VA Medicare Data and SEER data, and what recent changes there are in these datasets that the researchers should know about. The course will also provide detailed information on VA pharmacy data (PBM and DSS Pharmacy Extract) and will include a special presentation on the VA mortality database. *No prerequisites.*

To register online go to www.eric.seattle.med.va.gov

Course Faculty

Course Director

Edward J. Boyko, MD, MPH is the Director of the Seattle Epidemiologic Research and Information Center, a Professor of Internal Medicine at the University of Washington and Chief of the General Internal Medicine Section at VA Puget Sound Health Care System. He conducts an active research program in the epidemiology of type 2 diabetes mellitus and its complications. He is also interested in the methodology, application and interpretation of diagnostic tests. Dr. Boyko has served as consultant for NIH, VA, the American Diabetes Association, the International Diabetes Federation and industry. He is a member of the Editorial Boards of the journals *Diabetes Care* and *Obesity Research*.

Course Faculty

Garnet Anderson, PhD is a Member of the Public Health Sciences Division, Co-PI of the Women's Health Initiative Clinical Coordinating Center, Associate Head of the Gynecologic Cancer Research Program at the Fred Hutchinson Cancer Research Center and an Affiliate Associate Professor of the Department of Biostatistics at the University of Washington. Dr. Anderson's research emphasis is on the design, conduct and analysis of prevention trials, particularly related to women's health. She has been involved in the coordinating centers for three large prevention trials.

John C.S. Breitner, MD, MPH serves as Director of the GRECC at the VA Puget Sound Health Care System and Head of the Division of Geriatric Psychiatry at the University of Washington. Dr. Breitner's areas of clinical expertise include psychiatry, geropsychiatry and epidemiology. He has held appointments at the Johns Hopkins School of Hygiene and Public Health and the Department of Psychiatry and Behavioral Sciences at Duke University. Dr. Breitner's recent research has investigated the occurrence of Alzheimer's disease in twins, the interactions between specific genetic and environmental factors that modify the risk of Alzheimer's disease and a large-scale randomized clinical trial focused on the prevention of Alzheimer's disease using several commonly used medicines.

Susan DesHarnais, PhD is an Educational Specialist at the VA Information Resource Center and a Research Professor at Northwestern University's Institute for Healthcare Research. Her research interests include quality of care, with a special interest in risk-adjustment of outcomes data for benchmarking and quality improvement. She has also been doing research in the area of racial disparities in end-of-life care. She worked for several years as the Scientific Director of the National Cancer Data Base and was responsible for a major redesign of that database, including the complete documentation of files, implementation of security and quality control of data entry over the Internet and the development of benchmark reports that are now available and accessible over the Internet.

Paula K. Diehr, PhD is a Professor in the Departments of Biostatistics and Health Services at the University of Washington. She is a fellow in the American Statistical Association, the Association for Health Services Research and the American Association for the Advancement of Science. Her research interests emphasize evaluation of health providers, small-area variation research, group-randomized trials, quality of life, aging, dying and changes in the health status of older adults, including an emphasis on graphical approaches that account properly for death.

Course Faculty

Marie Diener-West, PhD is the Helen Abbey and Margaret Merrell Professor of Biostatistics Education at the Bloomberg School of Public Health, The Johns Hopkins University. Dr. Diener-West has worked extensively in areas of biostatistics, clinical research and clinical trials. She has served on multiple NIH study sections and data monitoring committees and is a member of the VA Cooperative Studies Evaluation Committee. She has been on the editorial board or an associate editor for several journals and is an author on more than 80 peer-reviewed publications. In 1991, 1997, 1998 and 2001, Dr. Diener-West was awarded the coveted Golden Apple Award for Excellence in Teaching at the Johns Hopkins Bloomberg School of Public Health.

Jack Goldberg, PhD is a Research Professor of Epidemiology at the University of Washington School of Public Health and Community Medicine. Dr. Goldberg's research focus is on the relationship of military service to psychiatric and physical health. He co-founded the Vietnam Era Twin (VET) Registry, which is one of the largest population-based samples of adult twins in the United States. His methodological work includes univariate and multivariate classical twin studies as well as co-twin control studies examining exposure and disease associations. He is currently investigating the long-term effects of PTSD on the physical health of Vietnam veterans in the VET Registry. He has more than two decades of experience teaching introductory and advanced epidemiologic methods to both clinical and non-clinical scientists.

Patrick J. Heagerty, PhD is an Associate Professor of the Department of Biostatistics at the University of Washington, and Associate Member, Fred Hutchinson Cancer Research Center. Dr. Heagerty's research interests include general regression techniques for dependent data and analysis of longitudinal biomarker data. He co-authored the textbook *Analysis of Longitudinal Data, 2nd Ed.* Dr. Heagerty is a collaborating biostatistician for research projects in areas that include orthopedics, neurosurgery, health services research and cardiovascular genetics.

Eric S. Johnson, PhD specializes in the design of pharmacoepidemiologic studies using healthcare databases. He is a Senior Research Associate at Kaiser Permanente Northwest's Center for Health Research in Portland, Oregon. He is also an Affiliate Assistant Professor in the Department of Pharmacy at the University of Washington, where he co-teaches a graduate course on pharmacoepidemiology.

Thomas D. Koepsell, MD, MPH is a Professor and former Chairman of the Department of Epidemiology at the University of Washington. Dr. Koepsell has conducted epidemiologic research on a wide variety of non-infectious diseases, particularly injury and conditions of the musculoskeletal, cardiovascular and nervous systems. He has also applied epidemiologic methods in health services research, particularly for evaluating community-based health promotion and disease prevention programs. He is the author or co-author of over 250 published articles. He and colleague Dr. Noel Weiss have co-taught a popular two-quarter graduate course sequence in epidemiologic methods for more than 15 years. Dr. Koepsell is the recipient of three prizes for outstanding teaching and has served as President of the Society for Epidemiologic Research.

Course Faculty

Alan R. Kristal, DrPH, MPH is Associate Head of the Cancer Prevention Program at the Fred Hutchinson Cancer Research Center and a Professor of Epidemiology at the University of Washington. He is a senior editor of *Cancer Epidemiology Biomarkers and Prevention* and an associate editor of the *American Journal of Epidemiology*. His current research focus is on the etiology and prevention of prostate cancer and on the role of diet and dietary compounds on cancer prevention. Dr. Kristal is involved in teaching and mentoring graduate students at the University of Washington and Fred Hutchinson Cancer Research Center. Dr. Kristal believes that the best strategy for obtaining research funding is to take the time necessary to prepare proposals that are good enough to be funded on the first submission.

Andrea LaCroix, PhD is a Member of the Public Health Sciences Divisions and Co-PI of the Women's Health Initiative Clinical Coordinating Center at the Fred Hutchinson Cancer Research Center, Professor of Epidemiology at the University of Washington, and an Investigator at the Center for Health Studies at Group Health Cooperative of Puget Sound. Dr. LaCroix's research interests include women's health, aging, osteoporosis and disease prevention. In addition to her involvement in the Women's Health Initiative, she's been a clinical center principal investigator on several single- and multi-center clinical trials.

Brian G. Leroux, PhD is an Associate Professor in the Department of Biostatistics and the Department of Dental Public Health Sciences at the University of Washington and an Affiliate Investigator at the Fred Hutchinson Cancer Research Center. His methodologic research interest is statistical methods for correlated data. His collaborative work covers a variety of areas including dental research, craniofacial birth defects, smoking prevention, drug addiction and toxicology.

Barbara McKnight, PhD is a Professor of Biostatistics at the University of Washington and a Member at the Fred Hutchinson Cancer Research Center. She has served as an Associate Editor for *Biometrics* as the Director of the Graduate Program in Biostatistics at University of Washington. In 1988 she received the Outstanding Teaching Award from the University of Washington School of Public Health. Her research interests have included statistical methods and applications in animal carcinogenicity testing, cancer and cardiovascular disease epidemiology, and genetic epidemiology. Dr. McKnight's current research interests include applications of causal modeling theories to the analysis of epidemiologic data and statistical applications in injury prevention research.

Min-Woong Sohn, PhD is Associate Director of the VA Information Resource Center, a Research Health Scientist at the Midwest Center for Healthcare Research and Policy Studies and a Research Assistant Professor at Northwestern University. His research interests include the effects of competition among hospitals on patient outcome, risk adjustment, cardiac care and data quality. His current research examines variations in the pattern of health care use among veterans using VA and Medicare and the association between competition, volume and outcome in cardiovascular care.

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Mark W. Smith, PhD is Associate Director of the VA Health Economics Resource Center (HERC). He performs research in the cost-effectiveness of health interventions and the economics of violence and mental health conditions. At HERC Dr. Smith leads the development of guidelines for micro-costing methods. In the VA Cooperative Studies program he serves as health economist for clinical studies of kidney failure and posttraumatic stress disorder. Beyond VA, Smith is an Associate of the Center for Primary Care Outcomes and Research (PCOR) at Stanford University. He works with researchers at the Stanford Prevention Research Center on a study of case management for heart disease prevention in a low-income population.

Todd H. Wagner, PhD is a health economist with the VA Palo Alto and a Consulting Assistant Professor in the Department of Health Research and Policy at Stanford University. Dr. Wagner's major research areas are health economics, health care financing and consumer use of health information. In the VA, he directs the development of a large cost database and he conducts cost-effectiveness analysis alongside multi-site clinical trials. He is also studying ways to improve the efficiency and quality of VA research administration and institutional review boards. Areas of expertise include the economics of information, cost-effectiveness analysis and quality of life measurement. He received his PhD in Health Economics from the Health Services and Policy Analysis Program at the University of California, Berkeley.

John E. Ware, Jr, PhD is the Chief Executive Officer, Chief Science Officer and Chairman of the Board at QualityMetric Incorporated. Dr. Ware co-founded QualityMetric in 1997 after serving for 12 years as Senior Scientist at The Health Institute, New England Medical Center (NEMC) in Boston, and Principal Investigator for the Medical Outcomes Study, where he created the SF-36® Health Survey and other tools widely used to monitor patients' outcomes. He was a Senior Scientist at the RAND Corporation, a Research Professor in the Department of Medicine at Tufts University School of Medicine, an Adjunct Professor in the School of Public Health at Harvard University and a member of the Institute of Medicine, National Academy of Sciences.

Sue Walsh, MBA, MS is a Higher Education Consultant for SAS®. She works with universities and colleges around the country to incorporate SAS technology into their curriculums and teaches workshops to introduce faculty members and students to SAS software. Ms. Walsh has 19 years of experience teaching mathematics and statistics in higher education and industry. Her expertise includes classical statistical techniques, design of experiments and data mining. She is also a veteran of the United States Air Force, where she served as a Communications-Electronics Officer and Acquisition Officer.

Noel S. Weiss, MD, DrPH is a Professor and former Chairman of the Department of Epidemiology at the University of Washington and a Member at the Fred Hutchinson Cancer Research Center. Dr. Weiss conducts research in cancer and clinical epidemiology, and also has contributed to the development of epidemiologic methods in several subject areas. He has published more than 400 articles in peer-reviewed journals, as well as two books on epidemiology. Dr. Weiss has received the Outstanding Teaching award from the School of Public Health and was the first recipient of the University of Washington Award for Distinguished Graduate Mentoring. He and Dr. Koepsell teach a popular two-quarter graduate course sequence in epidemiologic methods at the University of Washington, and on his own he teaches a one-quarter course on clinical epidemiology.

Registration

Non-VA Employee Application Deadline and Tuition

The application and payment deadline is June 13, 2005. Early application is encouraged. Once capacity for the classrooms is reached, applications will be considered on a space-available basis. Applications postmarked by April 15, 2005, will receive a $200 tuition discount. Please send application materials and payment to: John L. Messina, Department of Epidemiology, School of Public Health, University of Washington, Box 358280 (152 E), Seattle, WA 98195 or register online at www.eric.seattle.med.va.gov.

*Early Tuition Discount	$1,395 ($50 non-refundable)
Regular Tuition	$1,595 ($50 non-refundable)

* Tuition fee for applications postmarked by April 15, 2005.

VA Employee Application Deadline and Tuition

The application deadline is June 13, 2005. Early application is encouraged. Once capacity for the classrooms is reached, applications will be considered on a space-available basis.

As a part of VA sponsorship we are pleased to offer a limited number of tuition-exempt slots for VA and VA-affiliate employees. *To qualify for VA tuition exemption the applicant needs to be listed in the VA Outlook system*. If you have questions about whether you qualify as a VA or VA-affiliate employee, please contact John L. Messina, at 206-277-4376 or e-mail eric@med.va.gov.

Please send application materials to: John L. Messina, Department of Epidemiology, School of Public Health, University of Washington, Box 358280 (152 E), Seattle, WA 98195 or register online at www.eric.seattle.med.va.gov.

Textbook Fees

Textbooks are required for some courses. Each student will receive a list of required textbooks and a book order form. Textbooks may be ordered from the University of Washington or a bookstore of choice. Students should expect to spend up to $175 on textbooks for the entire Summer Session.

Cancellation and Refund Policy

To cancel your application and receive a course refund (less a $50 handling fee), please contact John L. Messina at 206-277-4376. Cancellation requests should be received by June 16, 2005. Due to scheduling commitments, we regret that we cannot offer a housing refund after June 1, 2005.

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Seventh Annual

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Registration

Applications must be received by June 13, 2005. Send application materials to: John L. Messina, Department of Epidemiology, School of Public Health, University of Washington, Box 358280 (152 E), Seattle, WA 98195. You may register online at www.eric.seattle.med.va.gov. Payment of tuition and/or room and board may be made by check, money order or credit card in U.S. dollars. Please make check or money orders payable to the University of Washington.

Please type or print

Name:	Dr. ☐	Mr. ☐	Ms. ☐	Mrs. ☐	SSN (last 4 digits only): ____ (required for continuing education credits only)

Title: | Organization:

Degrees: MD ☐ PhD ☐ PharmD ☐ RN ☐ DPM ☐ MPH ☐ Other ☐ Specify: _____

Address:

City: | State: | Zip: | Country:

Phone: | Fax: | E-mail:

Would you like on-campus room & board? Yes ☐ No ☐ (Room and board description on p. 15)

Do you have any special needs we can assist with? Yes ☐ No ☐ If yes, please specify _____

Tuition (VA employees)	VA employee ☐	Paid for by VA*
Tuition (on or before April 15, 2005)	$1,395	$ _____
Tuition (after April 15, 2005)	$1,595	$ _____
Room & board (not paid by VA)	single $340/double $500	$ _____
TOTAL AMOUNT ENCLOSED		$ _____

* VA or VA-affiliate employees in VA Outlook system

How did you hear about the course? Colleague ☐ This brochure ☐ Other ☐ Specify: _____

Check box if you have taken a graduate-level course in: Biostatistics ☐ Epidemiology ☐

Have you attended any previous summer courses in epidemiology and biostatistics?

University of Michigan ☐ Year _____ ERIC Summer Session ☐ Year _____ Ohio State University ☐ Year _____

Johns Hopkins ☐ Year _____ Other ☐ Please specify: _____ Year _____

Course Selections

Courses are offered on a first-come, first-served basis

Please choose a course for each time frame

8:00-10:00 AM M-F	Choose One: ___ Introduction to Epidemiologic Methods (four-hour block) ___ General Biostatistics ___ Introduction to Linear Regression ___ Clinical Trials: Guide to Design, Implementation, Analysis & Reporting ___ Economic Analysis with VA Data
10:30 AM - 12:30 PM M-F	Choose One: ___ Introduction to Epidemiologic Methods (continued from above) ___ Introduction to STATA® ___ Mulitlevel Data Analysis ___ Pharmacoepidemiology ___ Advances in Measuring Health Outcomes
2:00-4:30 PM M-Th	Choose One: ___ Developing Scientific Research Proposals (Grant Writing) ___ Introduction to SAS® ___ Applied Survival Analysis ___ Psychiatric Epidemiology ___ Using VA Data for Research: Cancer as an Example

SPECIAL ACTIVITIES

Do you plan to attend these functions (no additional cost):

Monday evening reception at the HUB East Ballroom? Yes ☐ No ☐

Wednesday evening buffet dinner at the UW Faculty Club? Yes ☐ No ☐

TECHNICAL ASSISTANCE

ERIC core researchers and University of Washington faculty will be available to provide technical assistance on your research topics. Technical assistance is available 4:30-5:30 PM Monday through Thursday. Advance scheduling is needed to request assistance.

Would you like to schedule technical assistance from course or UW faculty? Yes ☐ No ☐

What is your research topic? _____

I HAVE READ AND UNDERSTAND THE CANCELLATION POLICY (page 12)

Signature:	Date:

On-campus Housing

On-campus housing is available in Hansee Residence Hall on the University of Washington campus at $340 for a single room or $500 for a double including a $100 meal card per person for the week. These college dormitory rooms are furnished with a twin-size bed, a dresser, a desk, bed linens, towels, soap and drinking cups. There is a telephone and Internet connection in each room. Separate shared bath facilities are located on all floors and laundry facilities are available in each building. Television lounges and kitchenettes are located on most floors. The residence hall is a smoke-free environment. Please note that the dormitory rooms in no way resemble a classy hotel. If these accommodations are not acceptable to you, three hotels near the University of Washington campus are listed.

Hotels

If you elect not to stay in campus dorms, these hotels are close to the University of Washington:

University Silver Cloud Inn

5036 25th Ave. NE
Seattle, WA 98105
Phone: (800) 205-6940
http://www.scinns.com/universi.htm
Room Rate: $99
Mention you are traveling with the Seattle ERIC Summer Session group and the group code SEAERIC

Best Western University Tower

4507 Brooklyn Ave. NE
Seattle, WA 98105
Phone: (800) 899-0251
http://www.meany.com
Room Rate: $99-119

The University Inn

4140 Roosevelt Way NE
Seattle, WA 98105
Phone: (800) 733-3855
http://www.universityinnseattle.com
Room Rate: $105-$125

About Seattle

Combine a scenic landscape with the broad, rich culture of a growing metropolis and you have a city suited to all. Fine art lovers will find opera, ballet, art galleries and more equity theaters than any American city outside New York. Music devotees recognize Seattle as the birthplace of grunge, but it also was home to great names in jazz, R&B and classic rock while boasting the internationally acclaimed Seattle Symphony. Outdoors enthusiasts enjoy hiking, kayaking, canoeing, river rafting, fishing, clamming, a variety of national parks and spectacularly scenic golf. Everyone enjoys a trip to Pike Place Market and the Waterfront. Operating since 1907, Pike Place Market is the nation's oldest continually working farmers market. The Waterfront offers shopping, dining, ferry rides and stunning views of Elliott Bay, the Olympic Mountains and Mount Rainier. The Seattle Mariners play Oakland at Safeco Field during the Summer Session. Seats are available through Ticketmaster.

Cyber Session

Can't take all the courses you want this summer? Unable to attend the Summer Session in Seattle?

No worries — you can now take select Summer Session courses online. To get started, go to **www.eric.seattle.med.va.gov**. Most courses have 10 hours of content (Introduction to Epidemiologic Methods has 20) divided into 2- or $2^{1/2}$-hour modules. Continuing education credit is available for each individual module.

JOHN L, MESSINA
DEPARTMENT OF EPIDEMIOLOGY
SCHOOL OF PUBLIC HEALTH
UNIVERSITY OF WASHINGTON
BOX 358280 (152 E)
SEATTLE, WA 98195